

Application Serial No. 10/589,569

IN THE CLAIMS:

The following listing of claims replaces all prior listings of claims in the present application:

Listing of Claims:

1. (Currently Amended) A soldering nest, provided in a solid bus bar made entirely of a good electrical and heat-conducting material, ~~the bus bar having an aperture for the introduction~~ soldering of a terminal lead ~~to be soldered thereto~~, and wherein the introduction of the terminal lead [[may]] into the nest is to be effected from a first flat surface plane of the bus bar and soldering [[may]] is to be effected by the application of a soldering material and temporary contact with a source of heat from a second, opposite parallel flat surface plane of the bus bar, wherein: the nest comprises an aperture that is provided in the bus bar formed entirely of a good electrical and heat conducting material, with the aperture being formed by a conical bore which is perpendicular or approximately perpendicular to the first and second surface planes of the bus bar, which extends between the two surface planes, and whose cone angle is at least 30°; the apex of the conical bore is oriented toward the first surface plane of the bus bar[[.]]; and the conical bore terminates in a circular aperture, whose diameter is slightly greater than the diameter of the terminal lead, at the second surface plane.

2. (Previously Presented) The soldering nest as defined in claim 1, wherein the cone angle is between 50° and 90°.

3. (Previously Presented) The soldering nest as defined in claim 1, wherein the terminal lead is part of a semiconductor device.

4. (Previously Presented) The soldering nest as defined in claim 1, wherein the bus bar consists of metal.

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5. (Previously Presented) The soldering nest as defined in claim 4, wherein the metal is copper, a copper alloy, or silver.

6. (Previously Presented) The soldering nest as defined in claim 1, wherein the bus bar is a stand-alone bus bar without contact, at least adjacent the conical bore, with a solid insulating material.

7. (New) A method of providing a soldering a terminal lead to a bus bar made entirely of a good electrical and heat-conducting material, comprising: providing a bus bar formed entirely of a good electrical and heat-conducting material with an aperture formed by a conical bore which is perpendicular or approximately perpendicular to opposite first and second parallel surface planes of the bus bar, which extends between the two surface planes, whose cone angle is at least 30°; and with the apex of the conical bore being oriented toward the first surface plane of the bus bar and with the conical bore terminating in a circular aperture, whose diameter is slightly greater than the diameter of the terminal lead to be soldered to the bus bar, at the second surface plane; introducing the terminal lead into the aperture from the first surface plane of the bus bar; and applying soldering material to the aperture and temporarily contacting the soldering material with a source of heat at the second, opposite parallel surface plane of the bus bar to solder the terminal to the bus bar within the conical bore.

8. (New) The method as defined in claim 7, wherein the cone angle is between 50° and 90°.

9. (New) The method as defined in claim 7, wherein the terminal lead is part of a semiconductor device.

10. (New) The method as defined in claim 7, wherein the bus bar consists of metal.

11. (New) The method as defined in claim 10, wherein the metal is copper, a copper alloy, or silver.

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12. (New) The method as defined in claim 7, wherein the bus bar is a stand-alone bus bar without contact, at least adjacent the conical bore, with a solid insulating material.